HISTORY of Gas...

Through the ages with "MISS FLAME"

CENTURIES AGO, IN ANCIENT CHINA...
LOOK YONDER... A FIRE BURNS IN OUR GRAIN FIELDS!
WE MUST HURRY AND PUT IT OUT BEFORE IT SPREADS!
IT IS MERELY A BRUSH FIRE AND CAUSES NO DAMAGE...WE WILL PUT IT OUT EASILY AND SOON!
HELP IS NEEDED HERE, BROTHERS! THIS FLAME WILL NOT BE STOPPED!

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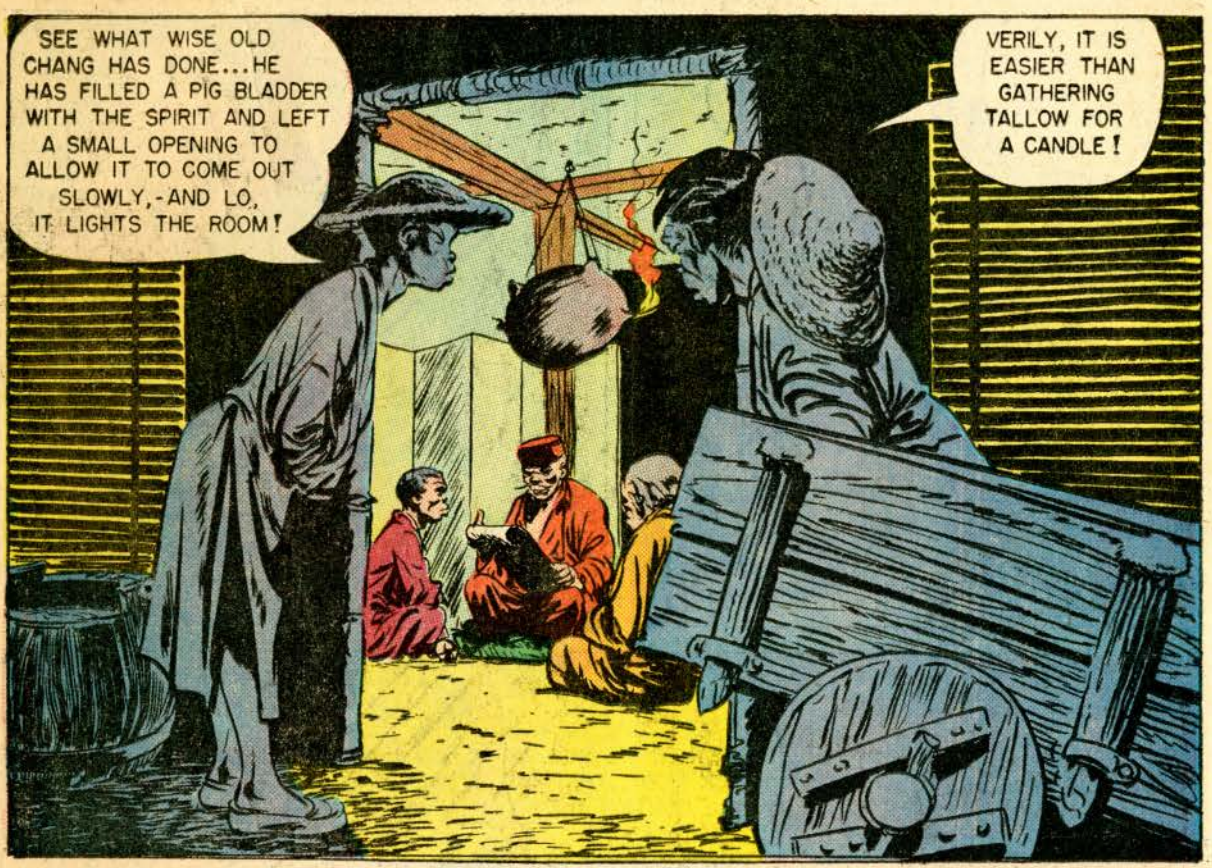
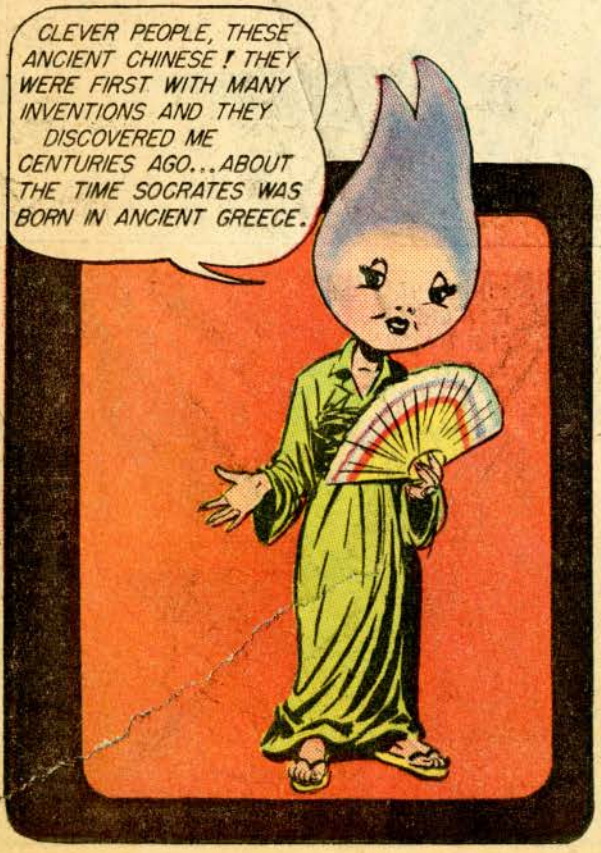
FOR WEEKS THE MYSTERIOUS FLAME CONTINUED TO BURN...A LANDMARK FOR THE CREDULOUS CHINESE,-A SIGN OF EVIL TO THE SUPERSTITIOUS...

PREPARED BY COMMERCIAL COMICS, INC.

ONE DAY...
WOULD THAT WE HAD SUCH A SPIRIT DOWN IN THE VALLEY WHERE WE MUST DRY OUT OUR SALT OVER FIRES! THESE STICKS ARE HEAVY AND THE FIRES MUST BE FED CONSTANTLY!
IT IS TRULY AN EVIL SPIRIT WHICH BURNS WHERE IT IS OF NO USE TO US!
EVIL SPIRIT INDEED!
I'LL SHOW THEM!
LOOK! THE SPIRIT TRAVELS THROUGH THE HOLLOW POLE AND BURNS AT THE END!
CAN THIS BE TRUE, BROTHER, OR IS IT A TRICK OUR EYES PLAY UPON US?

PERHAPS THE SPIRIT WILL TRAVEL ALL THE WAY DOWN TO THE VALLEY!
IT IS A THING WORTH TRYING!
WE MUST CALL THE OTHERS AND GATHER MANY MORE BAMBOO POLES!
WHERE TWO POLES ARE JOINED TOGETHER WE WILL PACK MUD...THAT WILL CONTAIN THE SPIRIT AS IT TRAVELS DOWN TO THE VALLEY!
OUR SCHEME WORKS! IT IS BETTER THAN CARRYING FIREWOOD!
TRULY IT IS A GREAT SPIRIT NOW, FOR IT IS OUR SERVANT!


SEE WHAT WISE OLD CHANG HAS DONE...HE HAS FILLED A PIG BLADDER WITH THE SPIRIT AND LEFT A SMALL OPENING TO ALLOW IT TO COME OUT SLOWLY,-AND LO, IT LIGHTS THE ROOM!
VERILY, IT IS EASIER THAN GATHERING TALLOW FOR A CANDLE!


CLEVER PEOPLE, THESE ANCIENT CHINESE! THEY WERE FIRST WITH MANY INVENTIONS AND THEY DISCOVERED ME CENTURIES AGO...ABOUT THE TIME SOCRATES WAS BORN IN ANCIENT GREECE.

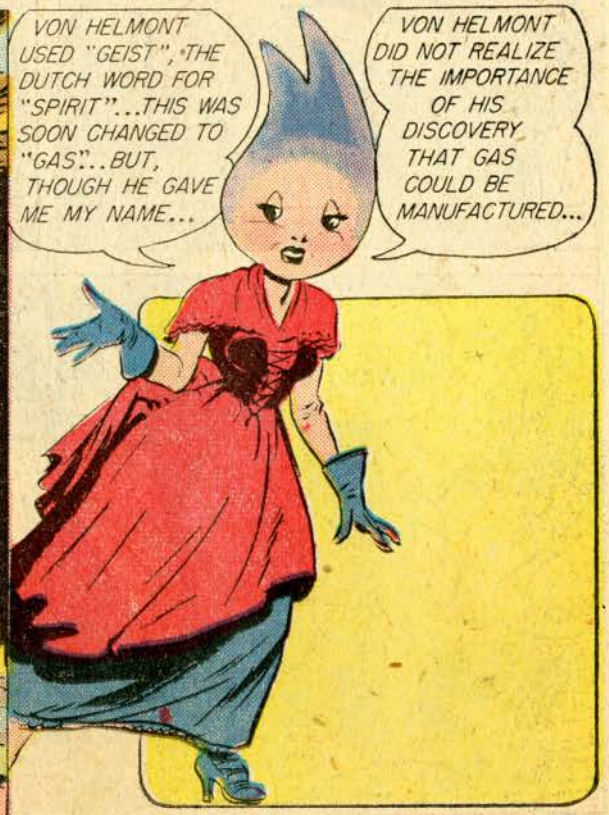
BUT IT WAS MANY CENTURIES BEFORE I WAS RE-DISCOVERED IN EUROPE AND RECEIVED MY NAME...THE MAN RESPONSIBLE WAS JOHN BAPTIST VON HELMONT, A LEARNED BELGIAN...IT WAS IN 1609, ABOUT THE SAME TIME RALEIGH LANDED NEAR JAMESTOWN, VIRGINIA.

VON HELMONT WAS PHILOSOPHER, DRUGGIST, JACK-OF-ALL SCIENCES... HE ALSO SERVED HIS NEIGHBORS AS PHYSICIAN.
HOLD STILL, JACQUES... MONSIEUR VON HELMONT IS THE GENTLEST PHYSICIAN IN THE CITY!
NOW TO GET BACK TO THE LABORATORY... MAYBE TODAY I WILL SUCCEED IN MY EXPERIMENTS.
FOR VON HELMONT WAS ENGAGED IN THE POPULAR PASTIME OF WISE MEN OF HIS DAY...SEARCHING FOR THE "PHILOSOPHER'S STONE"...
THERE MUST BE A WAY TO CHANGE THIS INTO GOLD...MAYBE MORE HEAT WILL DO THE TRICK... I'LL PUT ON MORE COAL...
A THOUSAND DEVILS!
A CHILD COULD HAVE DONE THAT!

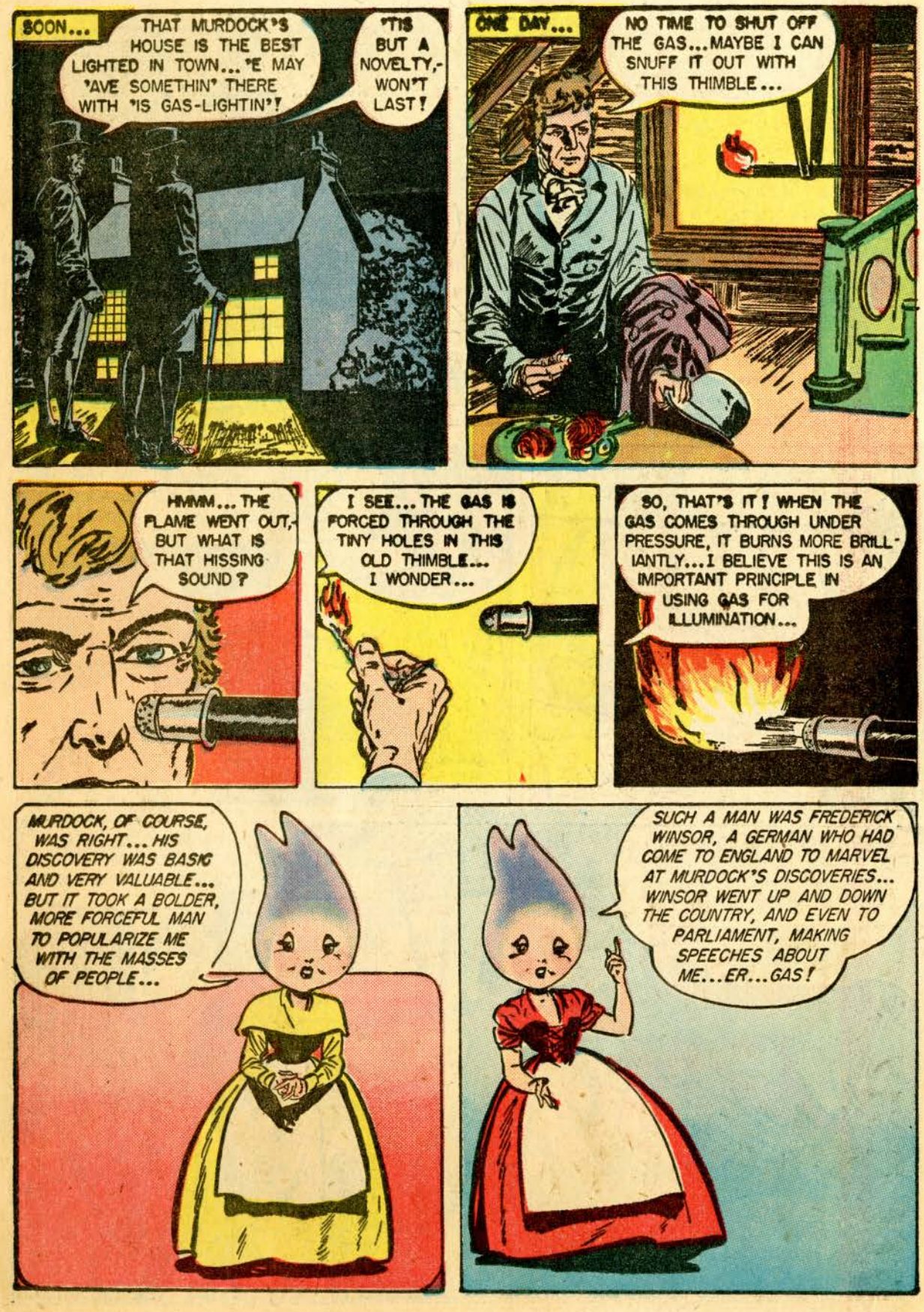
ALL THIS TIME WASTED BUILDING A NEW FIRE JUST BECAUSE OF A STUPID ACCIDENT...

COME QUICKLY, HELGA, SEE WHAT I HAVE DONE!

LOOK, I HAVE LOCKED IN THE KETTLE THE SAME WILD SPIRIT THAT IS OFTEN SEEN BURNING ON THE MARSHES AND IN THE FORESTS... IT COMES FROM THE COAL BURNING INSIDE!


VON HELMONT USED "GEIST", THE DUTCH WORD FOR "SPIRIT"...THIS WAS SOON CHANGED TO "GAS"...BUT, THOUGH HE GAVE ME MY NAME...
VON HELMONT DID NOT REALIZE THE IMPORTANCE OF HIS DISCOVERY THAT GAS COULD BE MANUFACTURED...

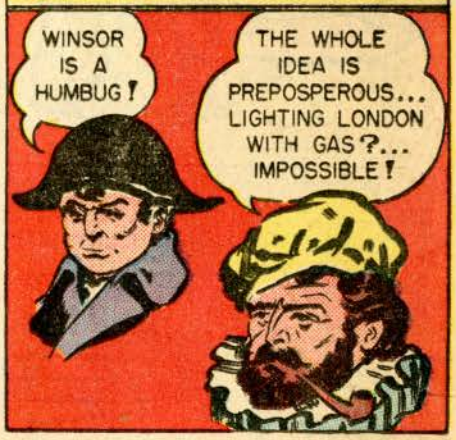
IN FACT, IT WAS ABOUT TWO CENTURIES LATER THAT AN ENGLISHMAN, WILLIAM MURDOCK, FIRST EXPLOITED ME... THAT WAS IN 1792, ABOUT THE TIME THE AMERICAN CONSTITUTION WAS BEING RATIFIED BY THE COLONIES...
THAT'S GAS COMING OFF THAT HEATED COAL OR I MISS MY GUESS... I WONDER...HMMM...
IF I PUT THIS COAL IN HERE,-COVER IT,-THEN HEAT IT...
AND LIGHT THE GAS COMING OUT THE STEM...IT WORKS!...BY THIS SAME METHOD I SHOULD BE ABLE TO ILLUMINATE MY WHOLE HOUSE!
WHEN I HEAT THE COAL IN HERE IT WILL SEND GAS THROUGH THOSE PIPES AND I WILL LIGHT MY HOUSE WITH IT!
OLD MURDOCK'S BEEN WORKIN' TOO 'ARD LATELY,-'E'S GETTIN' A BIT BALMY!


SOON...
THAT MURDOCK'S HOUSE IS THE BEST LIGHTED IN TOWN... 'E MAY 'AVE SOMETHIN' THERE WITH 'IS GAS-LIGHTIN'!
'TIS BUT A NOVELTY,- WON'T LAST!
ONE DAY...
NO TIME TO SHUT OFF THE GAS... MAYBE I CAN SNUFF IT OUT WITH THIS THIMBLE...
HMMM... THE FLAME WENT OUT,- BUT WHAT IS THAT HISSING SOUND?
I SEE... THE GAS IS FORCED THROUGH THE TINY HOLES IN THIS OLD THIMBLE... I WONDER...
SO, THAT'S IT! WHEN THE GAS COMES THROUGH UNDER PRESSURE, IT BURNS MORE BRILLIANTLY... I BELIEVE THIS IS AN IMPORTANT PRINCIPLE IN USING GAS FOR ILLUMINATION...
MURDOCK, OF COURSE, WAS RIGHT... HIS DISCOVERY WAS BASIC AND VERY VALUABLE... BUT IT TOOK A BOLDER, MORE FORCEFUL MAN TO POPULARIZE ME WITH THE MASSES OF PEOPLE...
SUCH A MAN WAS FREDERICK WINSOR, A GERMAN WHO HAD COME TO ENGLAND TO MARVEL AT MURDOCK'S DISCOVERIES... WINSOR WENT UP AND DOWN THE COUNTRY, AND EVEN TO PARLIAMENT, MAKING SPEECHES ABOUT ME... ER... GAS!

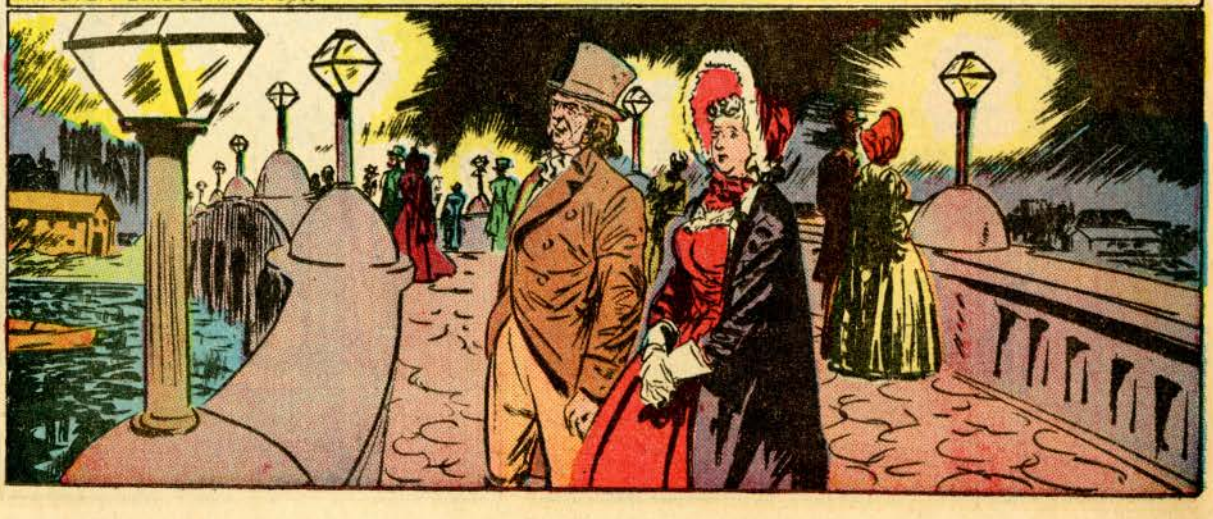
YOU MUST REMEMBER THAT LONDON, LIKE ALL CITIES OF THIS PERIOD, WAS A PRETTY DISMAL PLACE AT NIGHT... CRIME FLOURISHED UNDER THE PROTECTION OF DARKNESS... WINSOR WAS DETERMINED TO CHANGE ALL THIS...

GENTLEMEN OF PARLIAMENT, IF YOU WILL ALLOW ME, I CAN MAKE YOUR STREETS SAFE AT NIGHT,-LIGHT YOUR HOMES,-THIS BUILDING... MUCH MORE BRIGHTLY AND CHEAPER THAN WITH CANDLES.

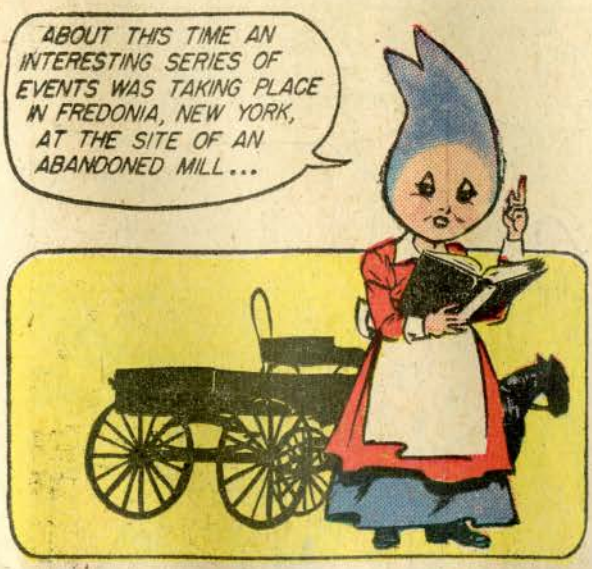
MOST OF THE POWERFUL MEN OF THE DAY, LIKE NAPOLEON AND SIR WALTER SCOTT, WERE FAR FROM ENCOURAGING...



BUT WINSOR WAS NOT TO BE STOPPED... HE ORGANIZED THE FIRST GAS LIGHTING COMPANY, AND, GREAT PROMOTER THAT HE WAS, HE STARTLED ALL THE WORLD BY ILLUMINATING LONDON'S FAMOUS WESTMINSTER BRIDGE IN 1813...



FROM THIS TIME ON, PEOPLE EVERYWHERE WERE EAGER TO SHARE IN THE BENEFITS OF MY SERVICE, AND I WAS JUST AS EAGER TO BE OF HELP.
DURING ALL THIS TIME, AMERICA WAS BY NO MEANS BEHIND IN REALIZING HOW USEFUL I COULD BE AS A SERVANT OF MAN...COME ALONG AND SEE WHAT WAS HAPPENING IN THE BALTIMORE MUSEUM OF AN ENTERPRISING FELLOW NAMED REMBRANDT PEALE...
WHAT YOU SEE HERE CAN BE DUPLICATED FOR THE STREETS OF BALTIMORE...WE CAN BE THE FIRST CITY IN THE WORLD THUS ILLUMINATED!
THE CITY TOOK UP PEALE'S CHALLENGE AND BALTIMORE **DID** LEAD ALL OTHER CITIES IN CITY-WIDE LIGHTING...
THIS IS WONDERFUL! WHY, WOMEN AND CHILDREN CAN NOW STROLL THE STREETS IN THE EVENING IN COMPLETE SAFETY,- THANKS TO GAS ILLUMINATION!


ABOUT THIS TIME AN INTERESTING SERIES OF EVENTS WAS TAKING PLACE IN FREDONIA, NEW YORK, AT THE SITE OF AN ABANDONED MILL...

I'LL BET THOSE BUBBLES RISING THROUGH THAT WATER ARE NATURAL GAS!
WELL, THERE'S ONE WAY TO FIND OUT!

YOU'RE RIGHT! WHAT DO WE DO ABOUT IT?
WELL, WE **COULD** DRILL THROUGH THIS SOFT LIME-STONE AND TRY TO FIND THE SOURCE...IT MIGHT BE A HUGE WELL OF NATURAL GAS!

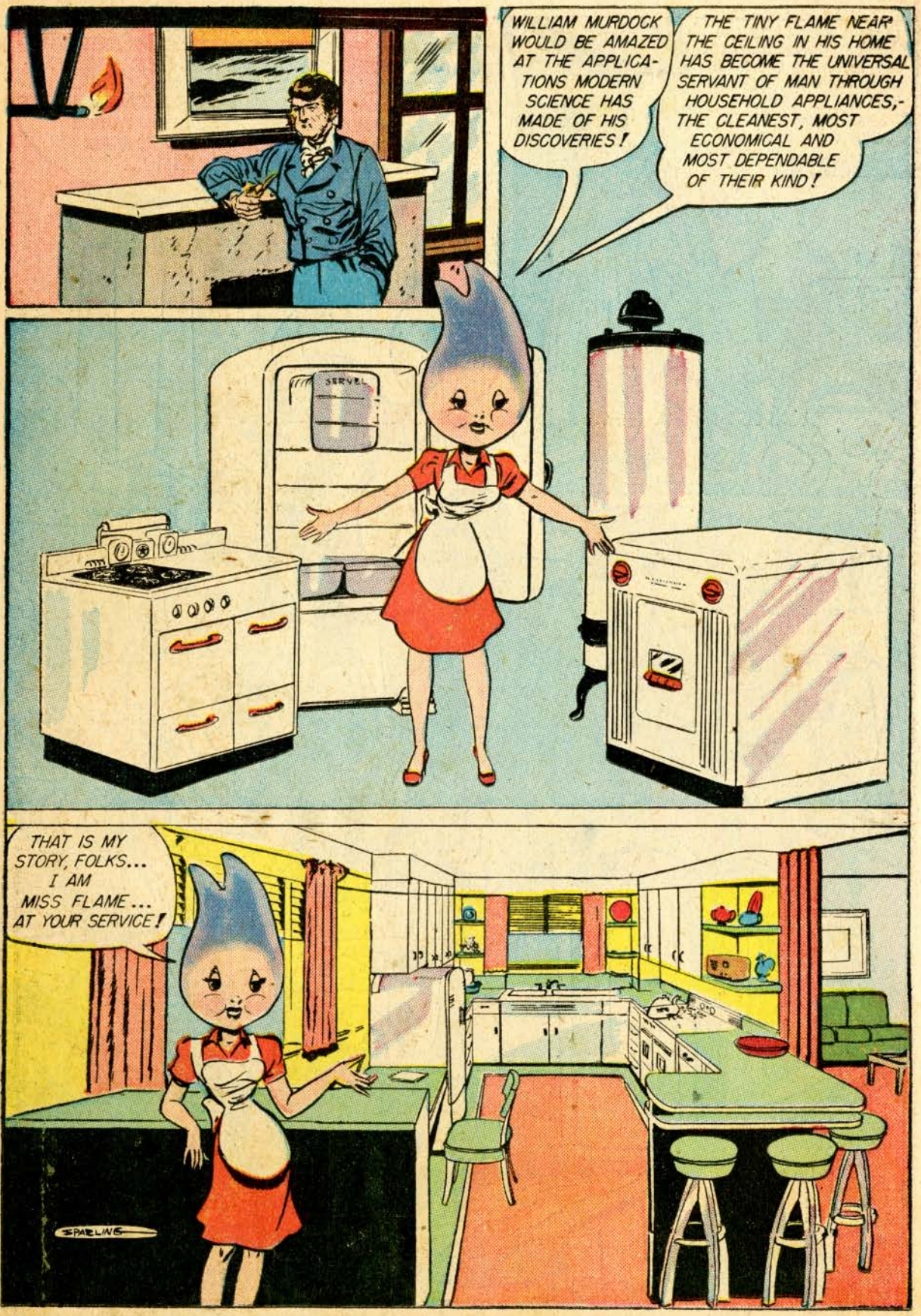
SOON A LEAD PIPELINE (QUITE AN IMPROVEMENT OVER BAMBOO POLES) WAS BRINGING GAS TO THE TOWN FROM WELLS SUNK THROUGH LIMESTONE...

HISTORY BOOKS RECORD THAT FREDONIA ENTERTAINED A MOST DISTINGUISHED VISITOR FROM FRANCE ABOUT THIS TIME... MARQUIS DE LAFAYETTE...

WELCOME TO FREDONIA, MONSIEUR LAFAYETTE!
THANK YOU! THIS IS INDEED THE MOST AMAZ-ING THING I HAVE SEEN IN AMERICA...THE WAY YOU USE GAS TO LIGHT UP YOUR WHOLE CITY!

NOT ONLY DO WE LIGHT OUR CITY WITH GAS, MONSIEUR LAFAYETTE, BUT THIS DELICIOUS MEAL ABOUT TO BE SERVED WAS **COOKED** WITH GAS!
IT IS SO EASY TO USE, MONSIEUR! SOON THE WHOLE WORLD WILL FOLLOW OUR EXAMPLE!
THE PEOPLE OF FREDONIA WERE RIGHT! AFTER CENTURIES OF IGNORANCE, MAN FINALLY CAME TO REALIZE HOW USEFUL I COULD BE!
WITHIN THE NEXT GENERATION, CITY AFTER CITY PUT ME TO WORK... I WAS FRONT PAGE NEWS FROM THEN ON...
1817 - BALTIMORE
1822 - BOSTON
1823 - NEW YORK
1833 - EVANSVILLE, INDIANA
1835 - NEW ORLEANS
1836 - MONROE, MICHIGAN
1838 - LOUISVILLE, KENTUCKY
1839 - ST. LOUIS, MISSOURI
1841 - CINCINNATI & PHILADELPHIA
1846 - NEWARK, N.J.
1847 - NEW HAVEN, CONN.
IT IS THE EVIL SPIRIT OUR FATHERS HAVE SEEN BURNING AWAY DEEP IN THE FORESTS OR HIGH IN THE MOUNTAINS!
I'VE COME A LONG WAY FROM THE EVIL SPIRIT WHICH BLAZED MYSTERIOUSLY ON A REMOTE HILLSIDE IN CHINA!

LOOK,-I HAVE LOCKED IN THE KETTLE THE SAME WILD SPIRIT THAT IS OFTEN SEEN BURNING ON THE MARSHES AND IN THE FORESTS... IT COMES FROM THE COAL BURNING INSIDE!
THE FLAME WHICH JOHN BAPTIST VON HELMONT SAW HOVERING OVER THE SPOUT OF A KETTLE HAS BEEN ADAPTED FOR USE IN 25,000 INDUSTRIAL PROCESSES, THUS PROVIDING EMPLOYMENT FOR MILLIONS IN MANUFACTURING, MAINTAINENCE AND RESEARCH...OUT OF THE LABORATORIES HAVE COME MANY NEW USES FOR GAS WHICH HAVE GONE INTO THE HOMES OF THE WORLD TO BRING COMFORT AND LEISURE TO DAILY LIVING...


WILLIAM MURDOCK WOULD BE AMAZED AT THE APPLICATIONS MODERN SCIENCE HAS MADE OF HIS DISCOVERIES!
THE TINY FLAME NEAR THE CEILING IN HIS HOME HAS BECOME THE UNIVERSAL SERVANT OF MAN THROUGH HOUSEHOLD APPLIANCES,- THE CLEANEST, MOST ECONOMICAL AND MOST DEPENDABLE OF THEIR KIND!
SERVEL
THAT IS MY STORY, FOLKS... I AM MISS FLAME... AT YOUR SERVICE!
SPARLING